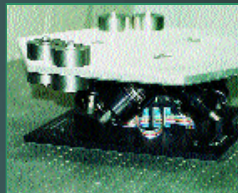
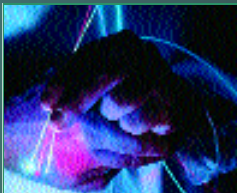
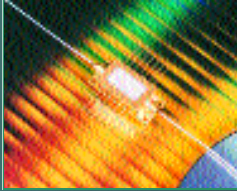


INTRODUCTION



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merica's strong support of world-class technologies has created a culture of innovation that will help our Nation remain competitive in the 21st century. We all can take pride in this support because innovation is key to producing technology breakthroughs that boost industrial and economic performance. However, we must also realize that such breakthroughs often have lengthy incubation periods; they can take years to mature into commercial products that become part of the fabric of everyday life. Some of today's most popular and useful technologies took more than a decade to go through the development process, mature, and find their markets, as shown in the table below.

HOW LONG DOES AN IDEA TAKE?

ITEM	CONCEPT	COMMERCIALIZATION	TIME GAP
Transistor	1940	1950	10 Years
TV	1907	1936	29 Years
Helicopter	1904	1936	32 Years
Zipper	1891	1923	32 Years
Diesel Locomotive	1895	1934	39 Years
Radar	1887	1933	46 Years
Ball Point Pen	1888	1938	50 Years
Fluorescent Light	1852	1934	82 Years